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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,753	09/17/2001	James Francis Riley	A20-029	8939

7590

07/22/2005

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EXAMINER

RACHUBA, MAURINA T

ART UNIT

PAPER NUMBER

3723

DATE MAILED: 07/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/936,753

Applicant(s)

RILEY ET AL

Examiner

M Rachuba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/17/01</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of group I in the reply filed on 12 May 2005 is acknowledged. The traversal is on the ground(s) that made with traverse on the grounds that search and examination of the claims of both Groups 1 and 11 would not constitute an undue burden on the Examiner as search and examination of the subject matter of claim 6 will entail a search and examination of the subject matter of claim 20. This is persuasive, and the restriction requirement has been withdrawn.

***Claim Objections***

2. Claims 7-12 and 18 are objected to because of the following informalities: claims 7 and 8, "centre" should be --center--; claim 18, "hacking" should be --backing--. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 15 limits the size of the mounting area to a

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diameter of less than or equal to 373 mm. The examiner could not find support in the specification for this limitation.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 20-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 20, line 2, "as hereinbefore described" is unclear, as claim 20, a dependent claim, does not have any structure previously limited.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3, 5, 7-11, 14 and 19 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Sauer, 4,328,645. Please refer to figures 1-5 and their descriptions.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer '645. Regarding claim 15, '645 does not disclose the size of the mounting area. It would have been an obvious matter of design choice to have made the mounting areas of the size desired, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). Here, one of ordinary skill would recognize the desirability of making the mounting areas of a size to accept standard and commercially available sanding discs.

12. Claims 6, 20-24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer '645 in view of Champayne 3,826,045. '645 discloses the claimed invention, but does not disclose that the mounting pad is adapted to be randomly orbitally driven. '045 teaches that it is old and well known to randomly orbitally drive abrading tools. It would have been obvious to one of ordinary skill to have

adapted the mounting plate disclosed by '645 for random orbital motion, as taught by '045, figures 1 and 2 and column 2, lines 1-23.

13. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer '645 in view of Leinfelt, 3,239,244. '645 discloses the claimed invention, including a dust extraction peg 34, the mounting plate having a thin backing plate with a peg aperture of a diameter slightly smaller than the external diameter of the peg and adapted to receive the dust extraction peg, and the thickness and resiliency of .the backing plate being such that the mounting plate may be pushed onto and pulled off the dust extraction peg. '645 does not disclose that the peg has an external circumferential groove, in which the backing plate resides during connection of the peg and mounting plate. In a vacuum connection device, '244, in a connection between two tubular parts, teaches forming a secure connection where one part fits into a groove of another, see figure 2. It would have been obvious to one of ordinary skill to have provided '645 with the vacuum dust extraction peg having an external circumferential groove, as taught by '244, figure 2, groove 14, to securely hold the peg with the mounting plate, ensuring a fluid tight seal between the two parts, see column 1, lines 17-23.

14. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer '645 in view of Champayne 3,826,045 as applied to claim 20 above, and further in view of Leinfelt, 3,239,244. '645 as modified by '045 discloses the claimed invention, including a dust extraction peg 34, the mounting plate having a thin backing plate with a peg aperture of a diameter slightly smaller than the external diameter of the peg and adapted to receive the dust extraction peg, and the thickness and resiliency of .the

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backing plate being such that the mounting plate may be pushed onto and pulled off the dust extraction peg. '645 does not disclose that the peg has an external circumferential groove, in which the backing plate resides during connection of the peg and mounting plate. In a vacuum connection device, '244, in a connection between two tubular parts, teaches forming a secure connection where one part fits into a groove of another, see figure 2. It would have been obvious to one of ordinary skill to have provided '645 with the vacuum dust extraction peg having an external circumferential groove, as taught by '244, figure 2, groove 14, to securely hold the peg with the mounting plate, ensuring a fluid tight seal between the two parts, see column 1, lines 17-23.

15. Claims 20, and 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Champayne 3,826,045 in view of Sauer '645, Leinfelt, '244 and Ashworth 4,731,894. '045 discloses the claimed invention but does not disclose a mounting plate having a plurality of mounting areas proud of an intervening web and adapted to have mounted thereto surface finishing pads, or that the random orbital means including at least one eccentrically driven weight, and the base plate is connected off center with respect to the weight to thereby result in a random orbital motion of the base plate. '645, figures 1-4, teaches an abrading tool having a mounting plate with mounting areas proud of an intervening web and adapted to have surface finishing pad mounted thereto. It would have been obvious to one of ordinary skill to have provided '045 with the mounting plate of '645, to allow the polishing pads to accurately follow a contour of the workpiece, column 1, lines 18-22. '045 discloses a vacuum extraction peg, that connects to a mounting plate backing plate, see figure 2, but does not disclose that the

peg has an external circumferential groove, in which the backing plate resides during connection of the peg and mounting plate. In a vacuum connection device, '244, in a connection between two tubular parts, teaches forming a secure connection where one part fits into a groove of another, see figure 2. It would have been obvious to one of ordinary skill to have provided '645 with the vacuum dust extraction peg having an external circumferential groove, as taught by '244, figure 2, groove 14, to securely hold the peg with the mounting plate, ensuring a fluid tight seal between the two parts, see column 1, lines 17-23. And '894, in a randomly orbitally driven polishing tool, teaches at least one eccentrically driven weight, and the base plate is connected off center with respect to the weight to thereby result in a random orbital motion of the base plate, as a suitable mechanism randomly orbitally drive a tool, to please refer to figure 1, weight 40. It would have been obvious to one of ordinary skill.

***Allowable Subject Matter***

16. Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Other similar devices are cited of interest.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M Rachuba whose telephone number is 571-272-4493. The examiner can normally be reached on Monday-Fridays.

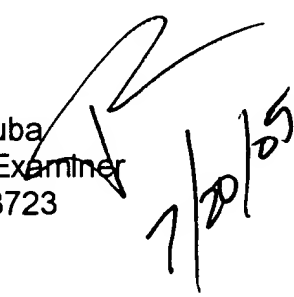


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M Rachuba  
Primary Examiner  
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A handwritten signature in black ink is written over the printed name 'M Rachuba'. To the right of the signature, the date '7/20/09' is handwritten in black ink.